



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D3118-3**Job Sheet 191568****Part No:** D3118-3**Job Qty:** 4 pcs**Part Name:** Sign Assembly**Part Weight:** 0 lbs**Status:** New**Priority:** Medium**Job Created:** 3/4/19**Job Tracking No:****Due Date:** 4/17/19**Created By:** Chantal Lavoie**Type:** Stock**Description:****Note:** DWG REV E IPP A: 02.05.15 New Issue NG IPP REV:B 12.05.11 AS PER DWG REV.D DD VERF:EC**Ship Via:****Bill of Materials****Job Routing**

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	4 pcs	4/17/19	4/17/19	0.00	0.00	Purchasing - 1		DP MAY 15 2019
							Purchasing - 2		
							Purchasing - 3		
110	Packaging 2-1 - Receive - B4B	4 pcs	4/17/19	4/17/19	0.00	0.00	Packaging 2 - 1 - B4B		DP MAY 15 2019
							Packaging 2 - 2 - B4B		
							Packaging 2 - 3 - B4B		
							Packaging 2 - 5 - B4B		
							Packaging 2 - 4 - B4B		
							Packaging 2 - 6 - B4B		
							Packaging 2 - 7 - B4B		
							Packaging 2 - 8 - B4B		
							Packaging 2 - 9 - B4B		
							Packaging 2 - 10 - B4B		
							Packaging 2 - 11 - B4B		
							Packaging 2 - 12 - B4B		
							Packaging 2 - 13 - B4B		
							Packaging 2 - 14 - B4B		
							Packaging 2 - 15 - B4B		
							Packaging 2 - 16 - B4B		
							Packaging 2 - 17 - B4B		
							Packaging 2 - 18 - B4B		
							Packaging 2 - 19 - B4B		
							Packaging 2 - 20 - B4B		
							Packaging 2 - 21 - B4B		
							Packaging 2 - 22 - B4B		
							Packaging 2 - 23 - B4B		
							Packaging 2 - 24 - B4B		
							Packaging 2 - 25 - B4B		
							Packaging 2 - 26 - B4B		
							Packaging 2 - 27 - B4B		
							Packaging 2 - 28 - B4B		



Dart Aerospace Ltd.
1270 Aberdeen Street
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CANADA
TEL: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S181543**Part:** D3118-3**Job No:** 191568**Serial No/Batch:** S181543**Revision:****Inspector:****Exp Date:****Instructions:** Various STC's

Date: 05/15/19

Plex 3/4/19 2:00 PM dart.lavoie.chanta

				Packaging 2 - 29 - B4B	
				Packaging 2 - 30 - B4B	
				Packaging 2 - 31 - B4B	
				Packaging 2 - 32 - B4B	
				Packaging 2 - 33 - B4B	
				Packaging 2 - 34 - B4B	
				Packaging 2 - 35 - B4B	
120 QC 6	4 pcs	4/17/19	0.00 0.00	QC 6 - 42	DAS
				QC 6 - 9	MAY 24 2019 40
				QC 6 - 68	9-89
				QC 6 - 61	
130 Packaging 3-1 - Stock - B4B	4 pcs	4/17/19	0.00 0.00	Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	STO 17 80 MAY 27 2019
				Packaging 3 - 5 - B4B	
				Packaging 3 - 6 - B4B	
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	DAS
140 QC 21 - SA	4 pcs	4/17/19	0.00 0.00	QC 21 - SA - 21	21
				QC 21 - SA - 70	9-89 MAY 27 2019
				QC 21 - SA - 53	

Part Op 100 - Purchasing - Issue P/O: 42795 Manufacture as per dwg D3118 Possible Supplier: SRB TECHNOLOGIES
 Descriptions: Supplier P#:9004043 Sign should be self-luminous to min. brightness of 160 microlamberts
 110 - Receive & Inspect for Damage & Mat'l Certs - Ensure Material Release Note is attached
 120 - QC6- All purchased or subcontracted products - Check dims to dwg and certification attached
 130 - Identify as per dwg & Stock Location:
 140 - QC21- Final Inspection - Work Order Release

MAR 05 2019

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x4

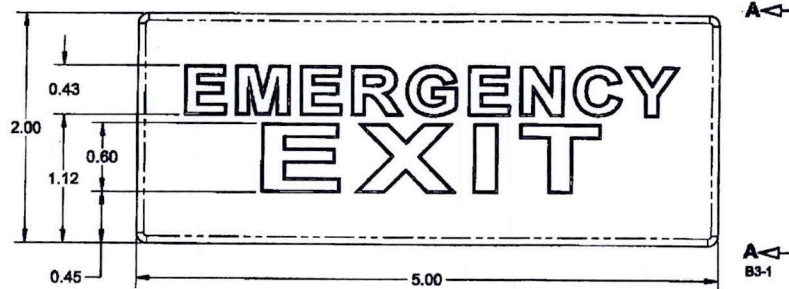
Job BOM

Part / Item	Component Name	Quantity	Operation	Container
9004043	Sign Assembly D3118-3	4 pcs (1 ea)	100-Purchasing	5181542

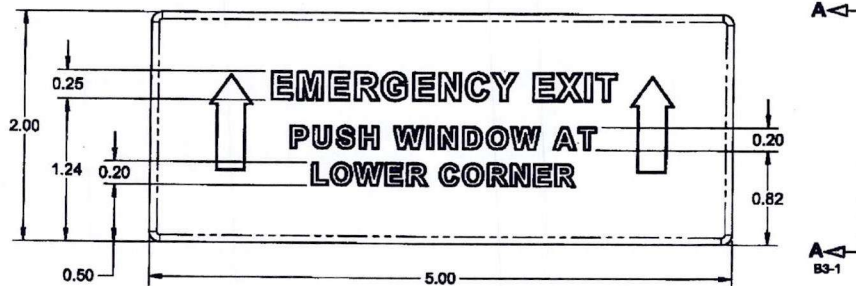
Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	9004043	4	0	0
Part Specifications				
Specifications could not be found.				

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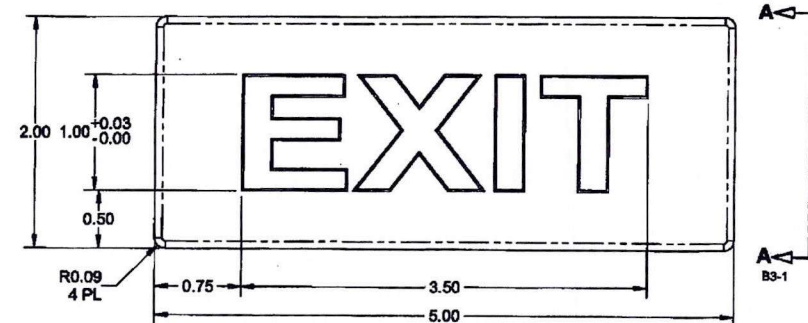
SPECIFICATION CONTROL DRAWING



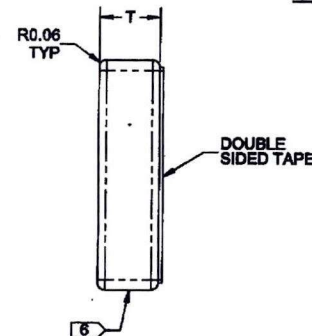
D3118-1 SIGN ASSEMBLY [9]
REPLACES PREMIER P/N 027-57000-01,
BHT P/N 46860-01008-00



D3118-3 SIGN ASSEMBLY [9]
REPLACES PREMIER P/N 027-57000-03,
BHT P/N 212-072-637-107



D3118-5 SIGN ASSEMBLY [9]



VIEW A-A C5-1
C1-1
B6-1

RELEASED
2013-08-01
MD

NOTES:

- 1) MATERIAL: POLYCARBONATE
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: WITH DART P/N "D3118-X" AND B/N "BXXXXX" PER DART QSI 044 6.1
- 7) WEIGHT: 0.30 lbs EACH
- 8) POSSIBLE SUPPLIER: SRB TECHNOLOGIES (CANADA), INC
320-140 BOUNDARY ROAD
PEMBROKE, ONTARIO, K8A 6W5
PHONE: 613-732-0055
FAX: 613-732-0056
- 9) SEE TABLE FOR SUPPLIER PROCUREMENT P/N'S
- 10) SIGNS SHOULD BE A RED BACKGROUND, CLEAR LETTERING WITH WHITE BORDER AROUND EACH LETTER
- 11) SIGNS SHOULD BE SELF-LUMINOUS TO MINIMUM BRIGHTNESS OF 160 MICROLAMBERTS

DART PART NUMBER	SUPPLIER PART NUMBER	THICKNESS "T"
D3118-1	9004030	0.52
D3118-3	9004043	0.52
D3118-5	9004001	0.66

E	REVISE SUPPLIER AND SUPPLIER PART NUMBERS	SFM	13.07.16
D	UPDATED TO COMPLY WITH QSI 043; ADDED SUPPLIER P/N PROCUREMENT CHART (ZN A4-1). REF: PAR11-127	MB	11.11.02
C	ADD D3118-5	RF	05.02.22
B	ADD MINIMUM BRIGHTNESS = 160 MICROLAMBERTS	RF	04.05.05
A	NEW ISSUE	RF	02.04.15
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN	SFM		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	13.07.16		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D3118 REV. E TITLE SIGN ASSEMBLY SHEET 1 OF 1 SCALE NTS COPYRIGHT © 2002 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO042795



Supplier: ROY003-VU
Royal Bank Visa (Robert Aboud)
x
xx
ON
Canada

PO No: PO042795

PO Date: 3/5/19

Due Date:

**Purchase Order
Revision:**

Revision Date:

Ship-To Contact: Phone:

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground

Pymt Terms: COD

Freight Terms:

Special Comments: SRBT TECHNOLOGIES

E-MAILED
MAR 05 2019

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1	191568	9004043		Sign Assembly D3118-3 AS PER DWG D3118 REV. E	Firmed XY	-	4/19/19 MAY 15 2019	4 pcs	0 pcs	4 pcs	\$413.54/pcs	\$1,654.16

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Order Notes

Procurement Quality Clauses

A005 RIGHT OF ENTRY

A016 PERSONNEL QUALIFICATION

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A032 DOCUMENT SPECIAL REQUIREMENTS

A033 STATEMENT OF CONFORMITY/TEST RECORDS FOR NAS, AN and MS FASTENERS

A040 NOTIFICATION OF QUALITY ESCAPE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENTS

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

[Handwritten signature]

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 3/5/19 8:43 AM dart.lavoie.chantal



SRB TECHNOLOGIES (CANADA) INC.

320-140 Boundary Road
Pembroke, Ontario, Canada, K8A 6W5

Tel.: (613) 732-0055

Fax: (613) 732-0056

E-Mail: sales@betalight.com

Web: www.betalight.com

CERTIFICATE OF CONFORMANCE

ACCOUNT TO:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON
Canada K6A 1K7

CERTIFICATE OF CONFORMANCE ID:

CDN006785

YOUR REFERENCE:

PO042795

OUR REFERENCE:

PO042795

DATE:

May 13, 2019

ITEM #	PART NUMBER	DESCRIPTION/ SPECIFICATION	QUANTITY	REMARKS/ DELIVERY POSITION
1	D3118-3 (9004043) SRBT P/N: 9004043	Sign Assembly T 4.25 Ci. (157.25 GBq) S/N's: 38844 - 38847 (Ref. Dwg# D3118 Rev. E)	4	Batch # B42795 (PO042795) Mfg. May/2019 Recommended expiry 7 years from Mfg date

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This is to certify that the whole of the material and/or parts described herein have been manufactured to the quality standards registered under ISO 9001:2008 and conform to the full specification of the appropriate drawings and purchase order requirements.

Test methods for Betalights™ and devices containing Betalights™, including leakage and surface contamination, conform to the British Defence Standard 62-4/4 and/or ANSI/HPS N43.4-2000.

Signed for on behalf of SRB Technologies (Canada) Inc.


N. Belleau, Quality Manager



Canadian Nuclear Safety Commission

Radiation Safety Data Sheet

This data sheet presents information on radioisotopes only.

For information on chemical compounds incorporating this radionuclide, see the relevant Material Safety Data Sheet.

Part 1 - RADIOACTIVE MATERIAL IDENTIFICATION

Chemical Symbol:	H	Common Names:	Tritium
Atomic Weight:	3	Atomic Number:	1

Part 2 - RADIATION CHARACTERISTICS

Physical Half-Life:	12.35 years
Unconditional Clearance Levels:	Activity Concentration (Bq/g) 1×10^3
CNSC Exemption Quantity:	Activity Concentration (Bq/g) 1×10^6 Activity (Bq) 1×10^9

Principal Emissions	Average Energy of Most Abundant Emission (MeV)	Maximum Energy of Most Abundant Emission (MeV)	Gamma-Ray Dose Rate at 1m Distance (mSv/h per GBq)	Shielding Information ¹
Neutrons	-	-	-	-
Gamma & X-ray	-	-	-	-
Beta* & Electron	0.0057	0.0186	-	Total absorption: <0.1 mm glass or <0.1 mm plastic
Alpha	-	-	-	-

* Where beta radiation is present, bremsstrahlung radiation will be produced. Shielding for bremsstrahlung radiation must be considered.

¹Delacroix, D. et al. Radionuclide and Radiation Protection Data Handbook 2002.

Progeny

Part 3 - DETECTION AND MEASUREMENT**Method of Detection:**

Wipes counted by a beta probe (e.g., wipes counted by a liquid scintillation counter)

Dosimetry:

External: TLD (whole body & skin) _____ Extremity _____ Neutron _____

Internal: Whole body _____ Thyroid _____ Urine analysis ☒ Other (specify) _____

Part 4 - PREVENTATIVE MEASURES

Tritium is not a radiation hazard unless it enters the body. Once in the body, tritiated water is uniformly distributed in the body water and can then expose tissue. The dose from inhaled elemental tritium gas is 10,000 times less than that from tritiated water. Tritiated water can be absorbed through the surface of skin, leading to an internal exposure. Gaseous tritium is a fire and explosion hazard when exposed to heat or flame and can react vigorously with oxidizing materials.

Recommended protective clothing: Lab coat and PVC gloves (0.5 mm thick) are preferred because of this material's low permeability to tritiated water. Many tritium compounds readily penetrate gloves and skin. Handle these compounds remotely, wear two pairs of gloves and change the outer layer at least every twenty minutes. Plastic aprons provide added protection especially against tritiated water. Plastic suits may be necessary for work at TBq levels or in an atmosphere contaminated with tritiated water.

Handle tritiated water, gases and volatile liquids in ventilated enclosures. Use glass containers to store tritium compounds because tritiated water and tritiated organic solvents will pass through plastic. Use disposable absorbent liners on trays.

Consult CNSC license for requirements concerning engineering controls, protective equipment, and special storage requirements.

Part 5 - ANNUAL LIMIT ON INTAKE

	Ingestion	Inhalation	
Compound Type	Tritiated water	Tritiated water	Elemental tritium gas
Annual Limit on Intake (Bq)	1.0×10^9	1×10^9	1.0×10^{13}

EMERGENCY PROCEDURES

The following is a guide for first responders. The following actions, including remediation, should be carried out by qualified individuals. In cases where life threatening injury has resulted, **first** treat the injury, **second** deal with personal decontamination. In the case of an emergency, the Radiation Safety Officer should be contacted as soon as practicable.

Personal Decontamination Techniques

- Wash well with soap and water and monitor skin
- Do Not abrade skin, only blot dry
- Decontamination of clothing and surfaces are covered under operating and emergency procedures

Spill and Leak Control

- Alert everyone in the area
- Clear area
- Summon Aid

Emergency Protective Equipment, Minimum Requirements

- Gloves
- Footwear Covers
- Safety Glasses
- Outer layer or easily removed protective clothing
- Suitable respirator selected

Canadian Nuclear Safety Commission
P.O. Box 1046, Station B
Ottawa, Canada
K1P 5S9

Tel: (613) 995-5894 Fax: (613) 995-5086
24 Hour Emergency Hotline: (613) 995-0479

Revision number: 1

Date of revision: 19 September 2011

Reviewed by: T. Sennett, Compliance Manager

Date: August 28, 2018